

**REMARKS**

Applicants appreciate the notification of allowable subject matter, i.e. that claim 61 is allowable.

Claims 29-32, 40-42, 52, and 58-69 are pending. Claims 29, 52, 60, and 69 are amended herein. No new matter is added by the amendments support therefor being found throughout the application as filed. Favorable reconsideration in light of the amendments and remarks which follow is respectfully requested.

**1. 35 U.S.C. §102 Rejections**

**Lee et al (USP 6,306,169)**

Claims 29-32, 40-42, 52, 58-59, and 62-69 are rejected under 35 U.S.C. §102(e) over Lee et al (USP 6,306,169).

Applicants respectfully traverse the rejection.

Lee describes a structure wherein a first matrix (“membrane”) is a porous macrostructure that is specifically designed and adapted to fills a cartilage free cavity. A second matrix (“suspension”) is designed and specifically provided within the porous macrostructure of the first matrix.

Thus, Applicants respectfully submit that the specific design of Lee’s matrix does not allow it to be applied over a cavity with the second matrix positioned beneath the matrix and within the cavity.

Thus, claims 29 and 52 are not anticipated by Lee. Claims 30-32, 40-42, 58-59, and 62-69 depend from claims 29 and 52 and, likewise, are not anticipated by Lee. Reconsideration and withdrawal of the rejection is respectfully requested.

**Minuth (USP 6,187,053)**

Claims 29-32, 40-42, 52, 58-59, 62, 63 and 65-69 are rejected under 35 U.S.C. §102(e) in view of Minuth (USP 6,187,053).

The Office asserts that Minuth describes materials or a kit for repair of cartilage comprising “a cartilage membrane (8), for application over a cavity” the “membrane (8) comprising a surface part having a composition (10) with a stimulation molecule”, and a “suspension (cells 9 in medium) capable of filling the cavity.”

Applicants respectfully traverse.

According to Minuth, a membrane 8 is provided with a cell layer 9. On top of the cell layer 9, a coating or layer 10 is provided. This structure is shown in Fig. 5. Thus, the membrane 8 does not comprise a surface part carrying coating or layer 10 (“composition”) as set out in Applicants claims. Further, the cells 9 (“suspension”), which are provided on the membrane 8, are coated with the coating or layer 10 and, thus, the cells 9 would not be capable of filling the cavity beneath the membrane (rather, they form a part of the membrane)

Accordingly, claims 29 and 52 is not anticipated by Minuth. Claims 30-32, 40-42, 58-59, 62, 63, and 66-69 depend from claims 29 and 52 and, likewise, are not anticipated by Minuth. Reconsideration and withdrawal of the rejection is respectfully requested.

2. 35 U.S.C. §103 Rejections

**Vibe-Hansen (USP 5,989,269)**

Claims 29-32, 40-42, 52, 58-60, and 62-69 are rejected under 35 U.S.C. §102(e) over Vibe-Hansen (USP 5,989,269) or, in the alternative, under 35 U.S.C. §103(a) over Lee et al (USP 6,306,169).

Applicants respectfully traverse.

Vibe-Hansen describes a method, instruments and kit for transplantation comprising a hemostatic barrier, transplanted material (e.g., chondrocyte cells) and a covering patch (see Fig. 3C). The hemostatic barrier may be coated with an organic glue, of which Tisseel is given as an example. (Col. 3, line 25-28 and col. 6, lines 45-55). Tisseel is said to contain fibronectin and fibrinogen, among other components. (Col. 6, lines 52-55).

The Office asserts that these materials will inherently induce a signal transduction in chondrocytes.

Applicants respectfully submit that in a previous response, the Office was provided with scientific proof that this assumption is unfounded. Applicant's previous response enclosed excerpts from an article by Mats Brittberg et al. entitled, "The influence of fibrin sealant (Tisseel®) on osteochondral defect repair in the rabbit knee," which was published in the journal Biomaterials, Vol. 18 (3) (1997) pp. 235-242. The authors conclude, "...a fibrin adhesive like Tisseel® is not suitable as a scaffold to promote repair of osteochondral defects in the rabbit knee." (emphasis added). Although Tisseel contains fibronectin and fibrinogen, they cannot induce signal transduction in this form as shown by Brittberg et al.

Therefore, Tisseel is not a "stimulation molecule" as defined by Applicants because it has been proven not to have the properties required of simulation molecules.

Accordingly, claims 29 and 52 are not anticipated by Vibe-Hansen. Claims 30-32, 40-42, 58-60, and 62-68 depend from claims 29 and 52 and, likewise, are not anticipated by Vibe-Hansen. Reconsideration and withdrawal of the rejection is respectfully requested.

#### **Lee et al (USP 6,306,169)**

As set forth above, Lee describes a first matrix ("membrane") comprising a porous macrostructure that is specifically designed to fill the cartilage free cavity, and second matrix ("suspension") provided within the porous macrostructure of the first matrix. Thus, Lee's matrix is applied within and not over the cavity. Further, Lee's second matrix is not capable of filling

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the cartilage free cavity beneath the matrix because it is provided within the matrix.

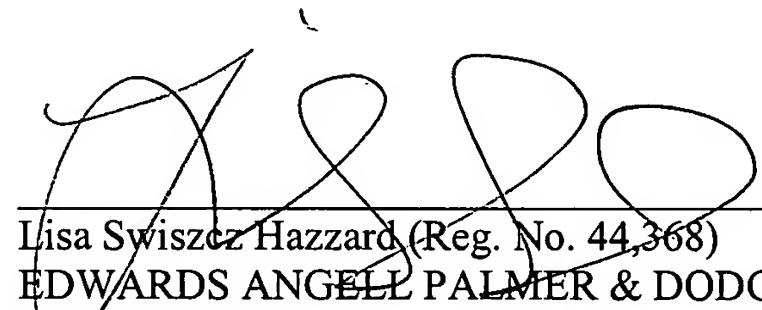
Accordingly, claims 29 and 52 are patentable over Lee. Claims 30-32, 40-42, 58-60, and 62-689 depend from claims 29 and 52 and, likewise, are patentable over Lee. Reconsideration and withdrawal of the rejection is respectfully requested.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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